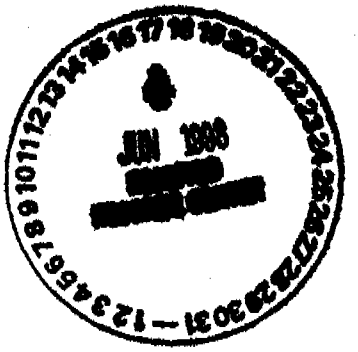


KAISER ▫ HILL
COMPANY

INTEROFFICE MEMORANDUM

DATE: March 26, 1997

TO: S.M. Nesta

FROM: Greg Sollner, Environmental Compliance and Management, Compliance and Performance Assurance (EC&M, C&PA), Bldg. T130C, x3541

SUBJECT: REVIEW OF PROJECT TO DECOMMISSION SITE BUILDINGS AND REVIEW OF DECOMMISSIONING BUILDINGS 980, 968 AND 965.

Upon review of the checklist for the decommissioning of the 980, 968 and 965 buildings, there is a concern with the "No" response regarding the creation of TSCA regulated waste.

The "No" indication appears to be qualified, however the note is unclear. Furthermore, a review of the draft decommissioning program plan failed to identify the potential for PCBs in the Decommissioning Process Flow, section 5.3 "Reconnaissance Level Characterization" and the "Expected Contaminants" section 3.2 only identifies electrical transformers with respect to PCBs. The presumption that PCBs do not existence at this point is premature. Thus, the Environmental checklist for buildings 980, 968 and 965 and the Decommissioning Program Plans are currently unacceptable with respect to TSCA PCB waste characterization.

Current data indicates that certain paints, electrical cable insulation, adhesives, and soft rubber items such as gaskets, o-rings, etc. potentially contain PCBs. Characterization of these items at the RFETS has not occurred in the past, but must now be addressed given recent findings at the DOE Savannah River Site (SRS) and a recent U.S. EPA interpretive memorandum, "Disposition of Surfaces Covered with PCB Containing Coatings", dated February 21, 1997.

The SRS has sampled and found PCBs in paint, in structural steel and administrative walls, electrical components and telephone cable. One particular paint sample from a shower stall revealed PCBs in the range of 22,000 ppm to 58,000 ppm. A briefing from Westinghouse Savannah River Company (WSRC) Senior Counsel, Environment (Attachment 1) summarizes some of this data. Additionally, Attachment 2 is a copy of a sampling strategy for excess equipment at the SRS which I obtained from Mr. David Ward, SSOC. Mr. Ward is monitoring developments and details relative to WSRC management of these PCB wastes.

The above cited USEPA interpretive memorandum (Attachment 3) essentially validates the SRS sampling and analytical strategy for determining the presence of PCBs. The USEPA states "While the TSCA PCB regulations do not require any coatings be tested for the presence of PCBs, such testing is advisable when PCBs are suspected since *parties are responsible under TSCA for compliance with use and disposal requirements whether or not they are aware of their presence.*" This memorandum discusses disposal options for metal surfaces with PCB coatings and further addresses PCB coated non-metal materials. "Disposal of concrete or other non-metal surfaces with PCB coatings, such as paint, must also be in accordance with the general rules applicable to the disposal of non-liquid PCBs."

The RFETS Decommissioning Program Plan **as well as any project or program where waste will be generated which may potentially contain PCB contaminates** (e.g. the decommissioning of 980, 965 and 968) must recognize the potential for the existence of PCB contaminates, and specifically address the strategy for characterization where PCBs are suspected.

Kaiser-Hill EC&M C&PA has initiated efforts to disseminate the available data through the Environmental Leadership Team meetings and in a meeting held on February 25,1997 with RMRS Environmental Management and representatives of RFETS D&D programs.

Attachments

As stated

cc:

K. North	KH
F. Phillips	KH
R. Nininger	KH
J. Wrapp	KH
P. Ervin	KH
L. Brooks	KH
B. Evans	KH
G. Konwinski	RMRS
G. Engelmann	RMRS
P. Edrich	RMRS
T. Benton	WSI
R. Sgrignoli	DCI
B. Wierzbicki	SSOC
D. Ward	SSOC

Attachment 1

PCB Contaminated Materials

Ann R. Gough
Senior Counsel, Environment

Polychlorinated biphenyls (PCBs)

- Part of an extensive series of synthetic organic chemicals known as chlorinated hydrocarbons
- PCBs are regulated under the Toxic Substances Control Act (TSCA).
- TSCA regulations provide a comprehensive framework for the control of PCB manufacture, distribution in commerce, use, storage and disposal and stringent requirements regarding the use and management waste/non-waste PCBs and PCB equipment.
- TSCA is a federally run program.

PCBs in paint

- PCBs were in paints manufactured prior to 1982
- According to DOD, their research has indicated that commercial use of PCBs in paints/coatings was most prevalent in the late 1950s and 1960s.
- Generally, they were the premium grades of paint, often special military specifications or special purpose uses.
- Known applications include the following:
  - flexible coatings used in high thermal heat environments or where thermal cycling or fluctuations were a concern
  - waterproofing
  - fire resistance
  - extreme chemical resistance (e.g. laboratory hoods and sinks; chemical storage areas)

Known applications continued...

- concrete paints in general
- structural steel
- stucco/masonry materials and asbestos surfaces such as siding, roofing and wallboard
- military specification paint used in system piping, system components and associated equipment (e.g. valves, heat exchangers, pumps, electrical cabinets, etc....)
- processing/holding tanks

- Other solids containing PCBs include the following:
  - electrical cable insulation in applications where fire resistance would have been an important design criteria
  - soft rubber items such as gaskets, o-rings used in assembly of electrical components, etc....
  - adhesive coating on ventilation gaskets in HVAC systems
  - adhesives
  - lagging cloth/paste
  - sheet rubber and rubber channel banding material used in cable ways, pipe hanger liners and isolation mounts
  - double sided adhesive tape

- Other uses include:
    - Asbestos roofing and siding materials manufactured by H. H. Robertson (circa 1917) and marketed as Robertson Protected Metal and Galbestos--multilayered steel siding materials consisting of steel, asphalt, or zinc; asphalt-impregnated asbestos felt; and an asphaltic waterproofing coating
    - Wool felt for sound dampening (submarines)

ISSUES

- Disposal
- Distribution in Commerce
- Unauthorized use

Disposal

- 40 CFR 761.60(4)--any non-liquid PCBs at concentrations of 50 ppm or greater in the form of contaminated soil, rags or other debris.
- Options for disposal are limited to incineration or disposal in a chemical waste landfill.
- Options are considerably more limited when have radioactive contaminated PCB materials.

Distribution in Commerce

- Processing or distribution in commerce of any PCB or PCB item, regardless of concentration, that is not specifically authorized is prohibited
- level of detection: 2 ppm
- Affects the resale/reuse/recycling of materials such as equipment that have painted surfaces contaminated with PCBs.

Anti-dilution rule

- The deliberate dilution of PCB materials assumed to contain PCBs at a concentration of 50 ppm with PCB-free materials or low-concentration PCBs to reduce the concentration of PCBs in the resultant mixture below 50 ppm is prohibited.
- any material that has been diluted is considered to have the original concentration of PCBs for the purposes of the TSCA regulations.

Authorized Use

- Section 6(e)(2) of TSCA prohibits the use, manufacture, process and distribution in commerce of any PCB other than in a "totally enclosed manner" except to the extent that EPA authorizes activities in a non-totally enclosed manner or exempts the activities

  - authorization may be valid for any time period; exemption is valid for one year

- EPA has indicated that the PCB contaminated paint may be an unauthorized use.

Proposed rule, 50 Fed. Reg. 62788 (December 6, 1994), may offer relief when finalized.

- large volume PCB wastes derived from an authorized original source containing less than or equal to 50 ppm pose little environmental risk

SRS

- Based on limited sampling, WSRC has found PCBs in paint
  - HWCTR: six of seven samples had PCBs. (range: 74 ppm to 1200 ppm.)
  - 232-F: PCBs found in paint from a shower stall (22,000 to 58,000 ppm); structural steel and administrative area walls (50 to 100 ppm)
  - 772-F: Analysis of five colors of paint--no PCBs
- With respect to electrical components and other materials analyzed for PCBs:
  - 15 of 35 samples contained PCBs at regulated levels--some of these were oil-filled items, some not
  - e.g. sample of telephone cable contained 710 ppm PCBs
- WSRC is working with EPA to resolve these issues.

Attachment 2

Westinghouse Savannah River Company
MEMORANDUM
Savannah River Technology Center

SRT-SCS-970002

Statistical Consulting Section

January 29, 1997

Prepared by: Jilene Weber, 773-42A JW
Joe Spears, 730-2B

Technical Reviewer: _____
E. P. Shine, 773-42A

Manager, Statistical Consulting Section: _____
R. Cary Tuckfield, 773-42A

SUBJECT: SAMPLING STRATEGY FOR EQUIPMENT IN 320-M AND 321-M JOB NO. 97023

SUMMARY:

Before equipment previously used in the 320-M or 321-M processes can be excessed, a determination of the PCB concentration in the paint must be made. Equipment manufactured after 1982 is assumed to be free of PCB and was not included in the sampling program. All remaining equipment to be excessed at this time was included in the sampling population. Each piece of equipment was placed in a stratum depending on the manufacturer, the date of manufacture, the type, and color of paint. Each piece of equipment could be placed in more than one stratum depending on the number of types and colors of paint.

One 10 gram sample was selected from each stratum except when the stratum was selected for a QC sample. A probability sampling strategy was used whenever possible depending on the amount of paint and number of pieces of equipment. The 10 gram sample was a composite of approximately five 2 g subsamples or ten 1 g subsamples. Each 10 gram sample will be analyzed for total PCB's. In the event that the total is above the analytical laboratory's sample detection limit, the main contributing PCB's could be identified. Each sample is an estimate of the stratum's true average concentration of PCB.

Two additional samples were selected for Quality Control (QC) samples. For the two strata in which the QC samples were collected, twenty grams of paint were collected, composited and then split into two equal samples. Each sample will be analyzed independently by the laboratory under two different sample identification and chain of custody numbers.

Within each stratum, a one square foot grid was used to select the five (ten) subsamples. A systematic sampling scheme was used whenever possible. For the three strata in which ten subsamples were selected, the grid system did not work. The pieces of equipment were selected first with each piece having equal probability of being selected. Within the selected piece of equipment, the size of the area with the desired paint (SRS yellow, orange, and blue) was determined. If the area was larger than 3 sq. ft., then the area was grided for selection. Otherwise, the entire area was considered to be eligible for paint collection.

In addition, certain pieces of equipment with high likelihood of operator contact were swiped to determine the leachability of PCB's, if any, from the paint during use. Both extrusion presses, three furnaces (or ovens), one welder, and two lathes were swiped. The location swiped was not determined using a probability sampling scheme but was collected from the site most likely to come in contact with the operator.

SELECTION STRATEGY:

Depending on the number of pieces of equipment and painted area of the equipment in each stratum, equipment and locations within equipment were selected at random from the stratum population. Five or ten subsamples were selected from each stratum. The total sample size was 10 g of paint chips except for the two strata in which quality control (QC) samples were selected. The five or 10 subsamples were composited into one sample to be analyzed by the laboratory. If the stratum contained more than 5 (10 for the 3 strata in which 10 subsamples are to be selected) pieces of equipment, 5 such pieces were selected at random. Otherwise, paint was sampled from each piece. After selecting the pieces of equipment, no more than 5 (10) locations on the equipment were selected at random. Either 2 g or 1 g of paint was scraped from each selected location (unless the sample was selected for a QC sample, in which case the target amount was doubled.) Selecting the sample from more than one location using a random probability scheme ensures that the paint sample is representative of the entire lot of paint used for the equipment. Stratifying the paint by manufacturer, date of manufacture, and color of paint ensures that estimates of the true average concentration can be made for each paint stratum.

If the total PCB concentration of the sample is less than the laboratory sample detection limit or greater than 50 ppm, no additional sampling will be done. If the concentration of PCB is above detection but less than 2 ppm, an additional sample or samples may be taken to estimate the variability and permit confidence intervals to be computed which will include the true average concentration unless over 50% of the eligible surface paint within the stratum was collected. If the concentration of PCB exceeds 2 ppm but is less than 50 ppm, then depending on the usage and amount of paint already collected, additional samples may be taken to estimate the variability and compute confidence intervals.

In addition to the manufacturer's paint, SRS has added yellow and/or orange safety/caution paint to certain areas and blue paint to electrical components on the equipment. SRS uses the same yellow, orange, and blue paint for all equipment throughout the site. Thus, estimates from the equipment included in this sampling population can be combined with estimates

obtained from other samples of the same type of SRS paint. SRS does not generally add enough of the safety (yellow and orange) and/or blue electrical paint on any piece of equipment to get a 10 g sample. All equipment with yellow SRS safety paint were placed in a stratum and a random sample of 10 pieces was selected and 1 g of yellow paint was scraped from each selected item. If the piece of equipment had more than one area painted yellow, the locations to be scraped were selected using random probability sampling. The same process was used for the stratum of equipment with orange paint and the stratum with blue paint.

The sampling strategy ensures that each type of paint will be sampled and that each sample will be representative of the average concentration of PCB's in the paint. If additional estimates of variability are required, additional samples will be collected. The QC samples can also be used as an estimate of variability.

Most of the strata contained only one piece of equipment or one piece with a second smaller auxiliary piece. For only the three SRS strata (yellow, orange, and blue) and for one manufacturer's stratum, were there more than 5 pieces of equipment. In all other strata, paint was sampled from each piece of equipment.

Swipe samples were also collected from equipment to determine if any PCB's in the paint could leach under operator contact. Equipment most likely to come in contact with an operator and most likely to have PCB's include the two extrusion presses and three furnaces. These five pieces of equipment were swiped. In addition, one welder and two lathes were swiped. The locations of the swipe sample within each piece of equipment was not determined using a probability sampling scheme but was selected from the area most likely to come in contact with the operator.

SAMPLE SELECTION:

Attached are the sample selection directions and log-sheets.

Table 1 describes the strata and the equipment sampled with the color of paint. The figures in the appendix depict the sampling locations within each piece of equipment. All equipment in the strata were sampled except for strata 21, 25 and 26. A equal probability sample of equipment was chosen for these three strata.

It was estimated that a one sq. ft. area would yield approximately 8 to 10 g paint chips depending on the thickness of the paint. A grid of 1 sq. ft. was used to select the subsamples from the equipment. The grid had to be loosely applied as the equipment was not rectangular. Selected grid intervals sometimes included void, unsafe, inaccessible, or small areas less than 1 sq. ft. When this occurred, the location selected was adjusted somewhat to allow a 1 sq. ft. painted accessible area with no safety hazards to be defined. For safety concerns, certain areas of the equipment had to be omitted from the sampling frame. These areas were areas reachable only by a ladder or requiring crawling over/under other equipment, areas with lots of wires, areas soiled with oil, or areas in which it would be difficult to scrape (some backs, sides, and tops). For railings and long narrow places, a three foot area was used for a grid. For the three strata (24 through 26), there was generally only a small amount of paint to be collected on any one piece of equipment. Thus 1 g samples were selected from ten pieces of equipment. If the area was large enough, a 1 sq. ft. grid was used. Otherwise, the entire area was selected in the hope that a 1 g sample could be obtained. Both extrusion presses have their own ladder and the top of the presses were eligible for sampling. EP111 has the top painted while EP252 did not except for SRS yellow on the railing. Both had motors and pumps sitting on top of the press.

The motors and pumps on both presses were eligible for sampling was were the railings on both presses and the floor baseboard for EP111. The painted floor on top of EP111 could not be scraped since it was constructed of wire mesh.

Two samples were also selected for QC samples. These were stratum 21, the controller cabinets in 321-M for the EP111 extrusion press and the SRS orange paint stratum 25. Twenty gram samples were selected, composited and split into two equal sized samples and sent to the laboratory for analyses under separate sample identification numbers. For stratum 21, five 4 g samples were collected and for stratum 25, ten 2 g samples were collected.

Eight swipe samples were collected and the leachate analyzed for PCBs.

TABLE 1: SAMPLING STRATA FOR 320-M AND 321-M EQUIPMENT

Stratum No.	Room No.	EP No.	Description	Manufacturer	Paint Color
Bldg. 320-M					
1	156	3011 3012.2	Lathe Turret 25 HP Lathe Turret 7.5 HP Swipe sample EP3011	Gisholt Lathe Gisholt Lathe	green green
2	156	280	Lathe-Engine	Monarch Lathe	green
3	156	276	Lathe-Turret	Warner Swasey	green
4	156	3013	Lathe-Turret 7.5 HP Swipe sample	Gisholt	green
5	156	3012.3	Lathe-Turret 7.5 HP	Gisholt	green
6	156	3018	Double Acting Press (2 pieces)	Hannifin Corp.	green
7	156	20718	Welder Swipe sample	Cecil C. Peck Co.	green
8	156	10718-1 10718-2	Welder Control Panel Welder	Harneschfeger	yellow
9	157	252	Extrusion Press Swipe Sample	Watson-Stillman	green/ glossy green
10	157	158	Controller Cabinets	Lindberg	gray
11	157	158	Lindberg Billet Heater Swipe sample	Lindberg Furnace	green
12	157	252	Controller cabinets		2 colors of green
13	157	252	Motors, pumps on top of 252 Extrusion Press See attachment 4. Sample 2 g. from each motor, pump on the selected side or top.		Gray
14	157	252	Console		bluish gray
15	157	255	Recorder Heat Furnace Swipe Sample	Brown Fintube Co.	green
16	157	255.2	Furnace Tempering 5 HP	Lindberg-Furnace	gray
17	157	20221	Saw T-Pin	Sala Adige	green

18	129	20219	Lathe-Engine-Long Bed	Lehmann	gray
19	131	20159	Stone Saw	Stone Machine	green

Bldg. 321-M

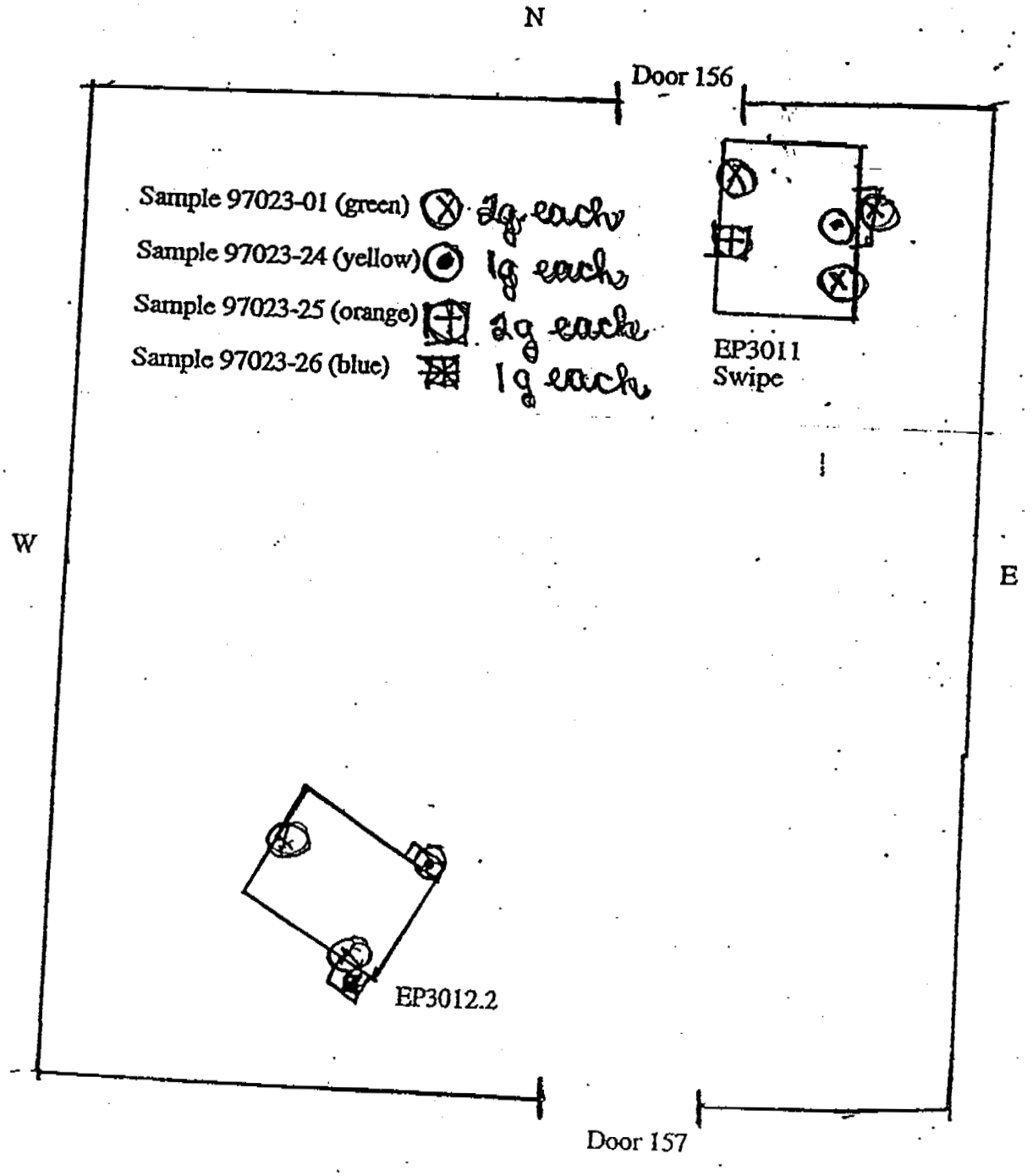
20		111	Extrusion Press 3 pumps: 150 HP model EY-15025, 75 hp model BY-6025, and 10 hp model P2304c4. 4 motors: Mandrel Positioning, 75 hp, serial EP451, Control-Preheat, 7723-3520, and control-die heat DW1409. Sample only pump on northeast edge. Swipe Sample	Lake Erie	blue
21		111.03	Cabinets Cabinets to be sampled: 1: EP111.11 Starter 150 hp hydraulic pump 440 V, 3 hp PDP 3 Cir, Westinghouse, 2: PDP 3 Extrusion Press EP513.03, 440 V, 3: Starter for 10 HP Press Control Panel 30 KVA 440 V 3 hp PDP3 Cir 4, 4: Hydraulic Pump press control Panel 30 KVA 440 v 3 hp PDP 3 Cir 4, 5: Container Heater 440 v 3 hp PDP 3 Cir 3. Not sampled: Die Heater 20 KW 440 V, 3 hp PDP 3 Cir 7, Extrusion Press Hydraulic Controls (Oilgear), and Starter 175 hp Hydraulic pump 440 v 3 hp PDP 3 Cir 2. Quality Control Sample (collect 20 g sample over 5 subsamples, 4 g each).		blue
22		20169	Oven Swipe Sample	Dispatch Industries	gray
23			Crane		gray

Over both buildings

24			Collect 1 g samples from (1) EP3011, (2) EP3012.2 (3) EP280, (4) EP3013, (5) EP3012.3, (6) EP3018, (7) EP252, (8) EP20169 Bldg. 321-M, (9) Crane, Bldg. 321-M, and (10) EP111, Bldg. 321-M (Sample all in stratum, 1 g each)		SRS yellow
25			Collect 2 g samples from (1) EP3011, (2) EP280, (3) EP3012.3, (4) EP3018, (5) EP20718, (6) EP20221, (7) EP255, (8) EP158, (9) EP20219, (10) EP20169, Bldg. 321-M (Unsampled in stratum: EP111, EP3012.2,EP 3013, and EP276) Quality Control Sample (Collect 20 g sample, 10 subsamples, 2 g each).		SRS orange
26			Collect 1 g samples from (1) EP3012.2, (2) EP276, (3) EP3013, (4) EP3012.3, (5) EP3018, (6) EP20718, (7) EP20221, (8) EP158, (9) EP20169, Bldg. 321-M, and (10) EP20159 Bldg. 320-M (Unsampled in stratum: 3011, 280).		SRS blue

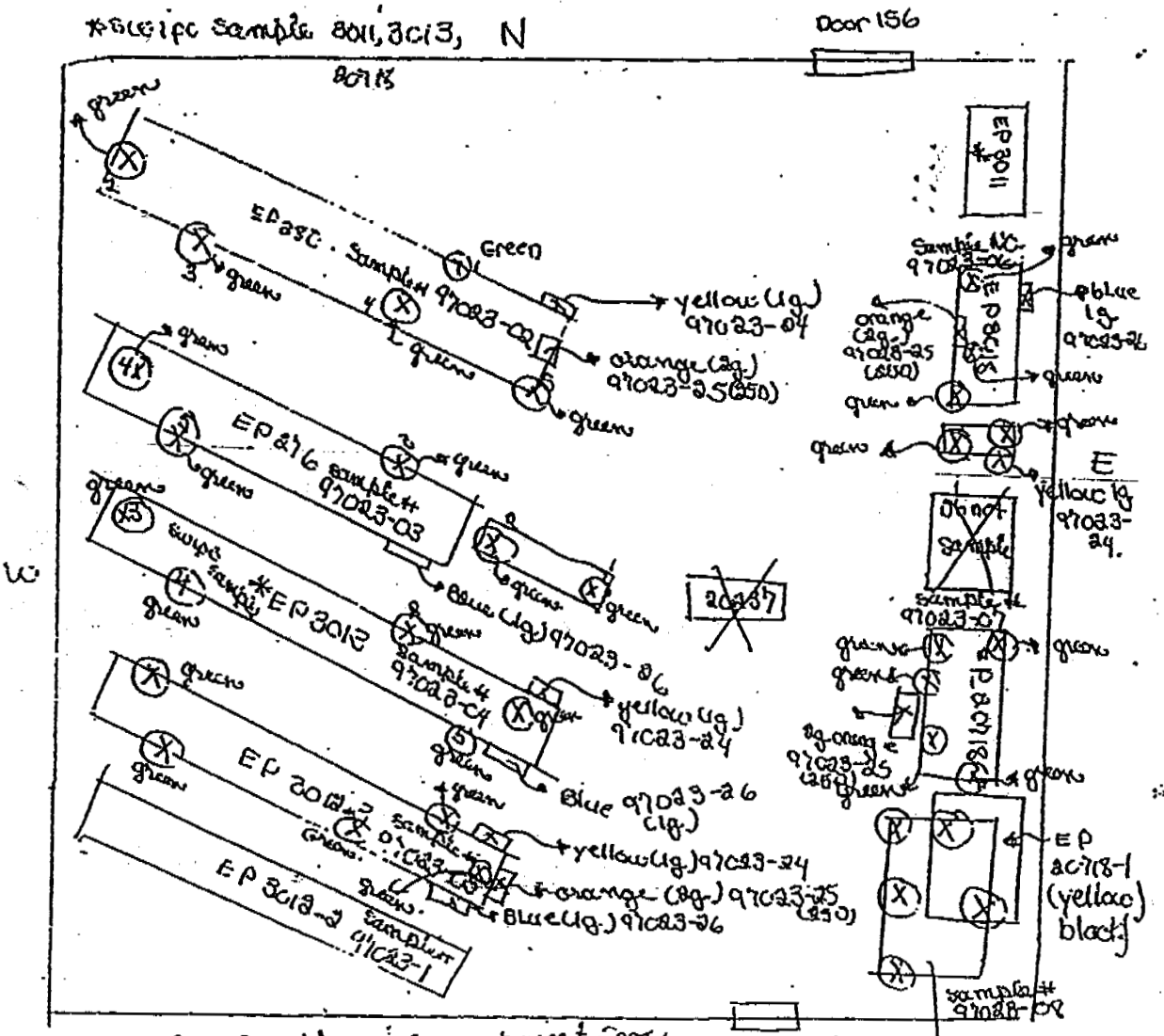
ATTACHMENT 1

BLDG. 320-M, ROOM 156, STRATUM 1 (GREEN), STRATUM 24 (YELLOW), STRATUM 25 (ORANGE), AND STRATUM 26 (BLUE)
SAMPLE NO. 97023-01 (GREEN), SAMPLE NO. 97023-24 (YELLOW), SAMPLE NO. 97023-25 (ORANGE), AND SAMPLE NO. 97023-26 (BLUE).
EQUIPMENT NOS.: EP3011, AND EP3012.2
SWIPE SAMPLE EP3011



ATTACHMENT 2

BLDG. 320-M, ROOM 156 STRATA 2 - 7 (GREEN), 8 (YELLOW), 24 (YELLOW), 25 (ORANGE), AND 26 (BLUE)
SAMPLE NOS. 97023-02 THRU 07 (GREEN), 97023-08 (YELLOW), 97023-24 (YELLOW), 97023-25 (ORANGE), AND 97023-26 (BLUE)
EQUIPMENT NOS.: EP280, EP276, EP3013, EP3012.3, EP3018, EP20718, EP10718-1, AND EP10718-2
SWIPE SAMPLE EP3013 AND EP20718



FIVE 8g. Samples of green paint from EP280, sampled 97023-02
EP276, Sample # 97023-03
EP3013, Sample # 97023-04
EP3012-3, Sample # 97023-05
EP3018, Sample # 97023-06
EP20718, Sample # 97023-07
Composite over the 5 subsamples to one 10 g. Sample per piece of equipment

FIVE 8g. Samples of yellow/black - composite (EP20718-1 + EP10718-2) Sample # 97023-08

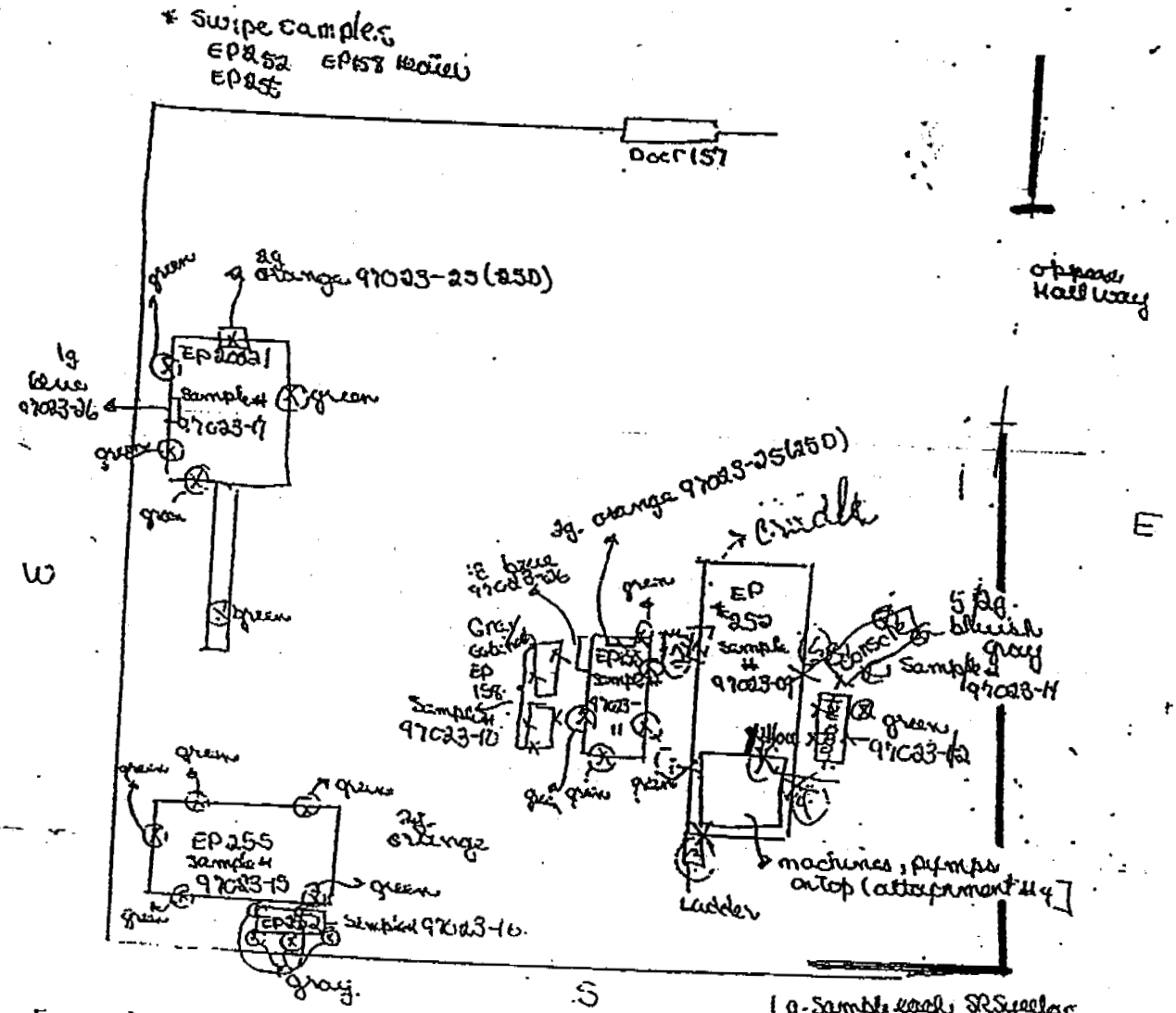
By addition swipe samples of SRS yellow, orange & blue collected (later, each color composited) 97023-24

lg. yellow from EP3011, EP3012-2, EP280, EP3012-3, EP3018

ATTACHMENT 3

BLDG. 320-M, ROOM 156 STRATA 9-17 (EXCEPT 13), 24-26
SAMPLE NOS. 67023-09 THROUGH 67023-17, 67023-24 THROUGH 67023-26
EQUIPMENT NOS. EP252, EP158, EP255, EP255.2, EP20221, MOTORS, CONTROLLER CABINETS AND CONSOLE FOR EP252
SWIPE SAMPLE EP252, EP158, AND EP255

N



Five 2 g. Samples (composite into one 10g sample)
EP 252 Sample # 97023-09
EP 158 Sample # 97023-11
Controller Cabinets Sample # 97023-12
EP255 Sample # 97023-15
EP 20221 Sample # 97023-17

Five 2g. gray Samples (composite into one 10g sample)
EP255.2 Sample # 97023-16
Console Sample # 97023-14
EP158 Cabinets Sample # 97023-10

1 g. Sample each SRS yellow
EP252
Sample # 97023-24

3g. Sample each SAS orange
EP 20221
EP 255
EP 158
Sample # 97023-25 (250)

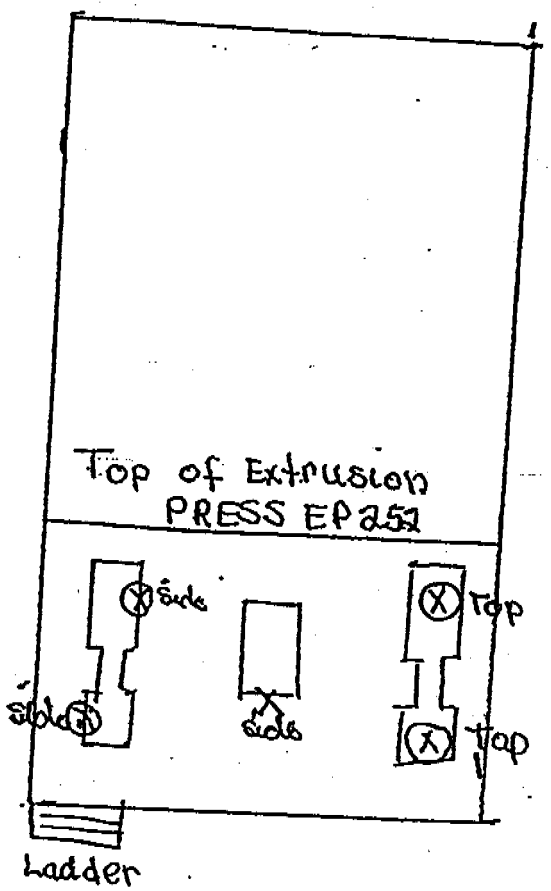
3. Sample each SRS blue
EP 20221
EP 158
Sample # 97023-26

ATTACHMENT 4

BLDG. 320-M, ROOM 156, STRATUM 13
SAMPLE NO. 67023-13
MOTORS AND PUMPS ON TOP OF EP252 (GRAY)

N

W



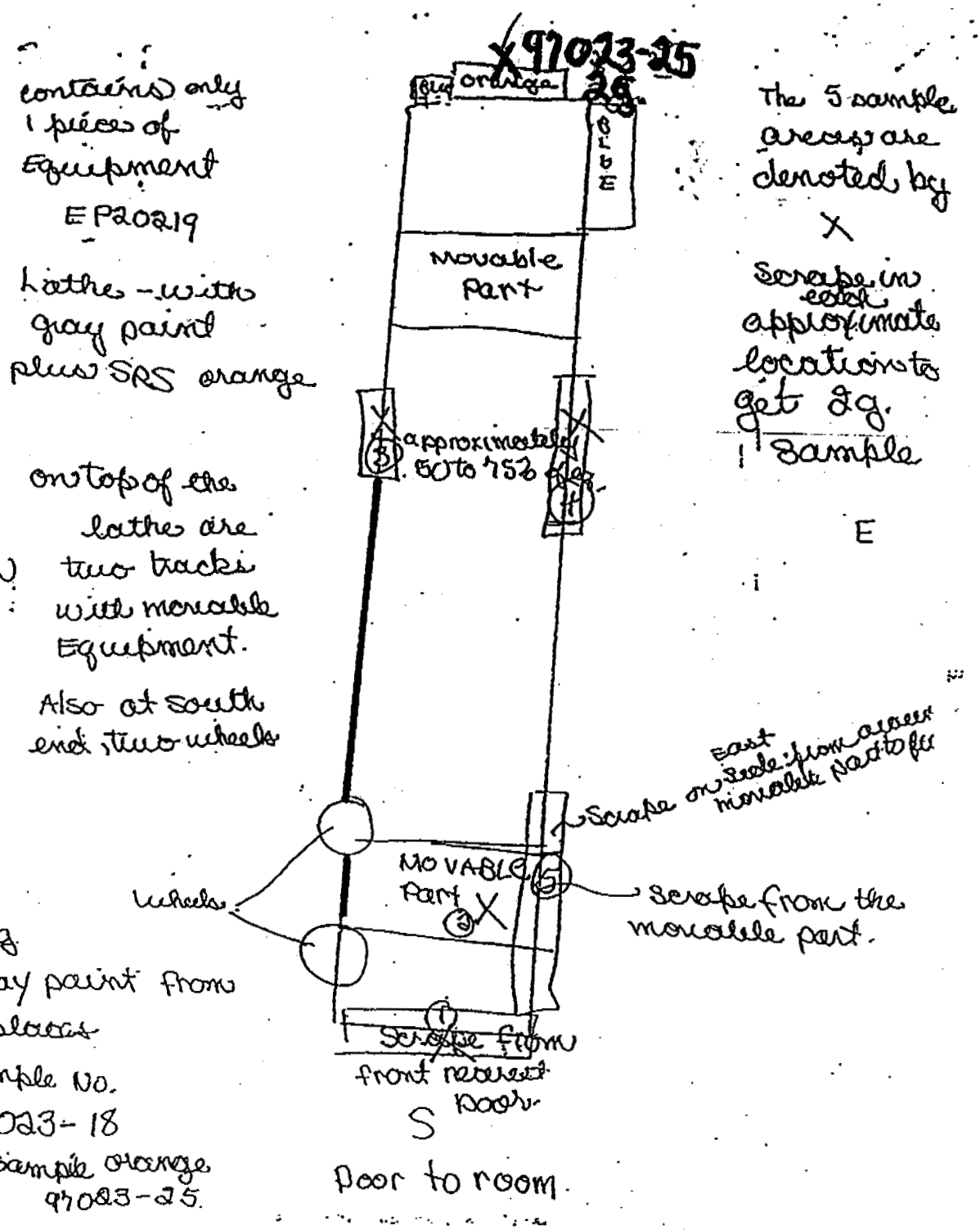
E

S

Sample No 97023-13 gr (all shades)
5 3g. Samples
Composite into 1 10g. Sample

ATTACHMENT 5

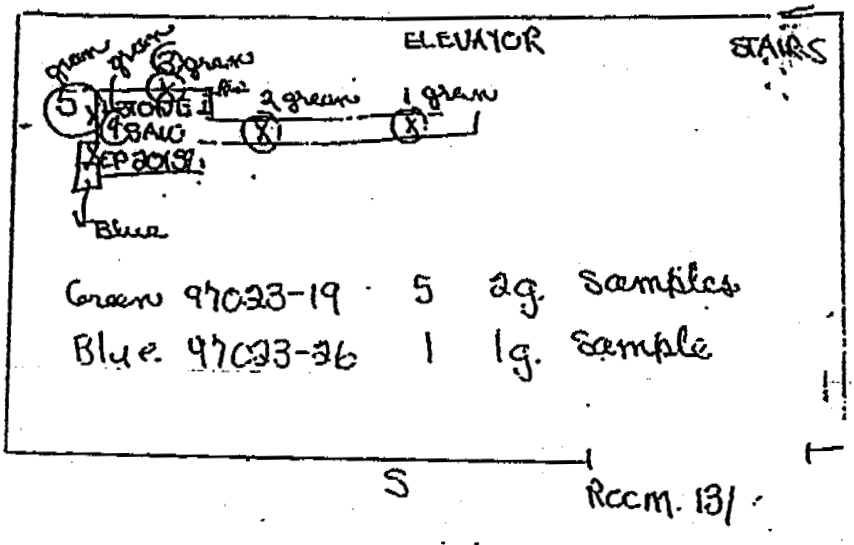
BLDG. 320-M, ROOM 129, STRATA 18 (GRAY) AND 25 (ORANGE)
SAMPLE NOS. 67023-18 (GRAY) AND 67023-25 (ORANGE)
EQUIPMENT NO. EP20219



ATTACHMENT 6

BLDG. 320-M, ROOM 131, STRATA 19 (GREEN) AND 26 (BLUE)
SAMPLE NOS. 67023-19 (GREEN) AND 67023-26 (BLUE)
EQUIPMENT NO. EP20159

N



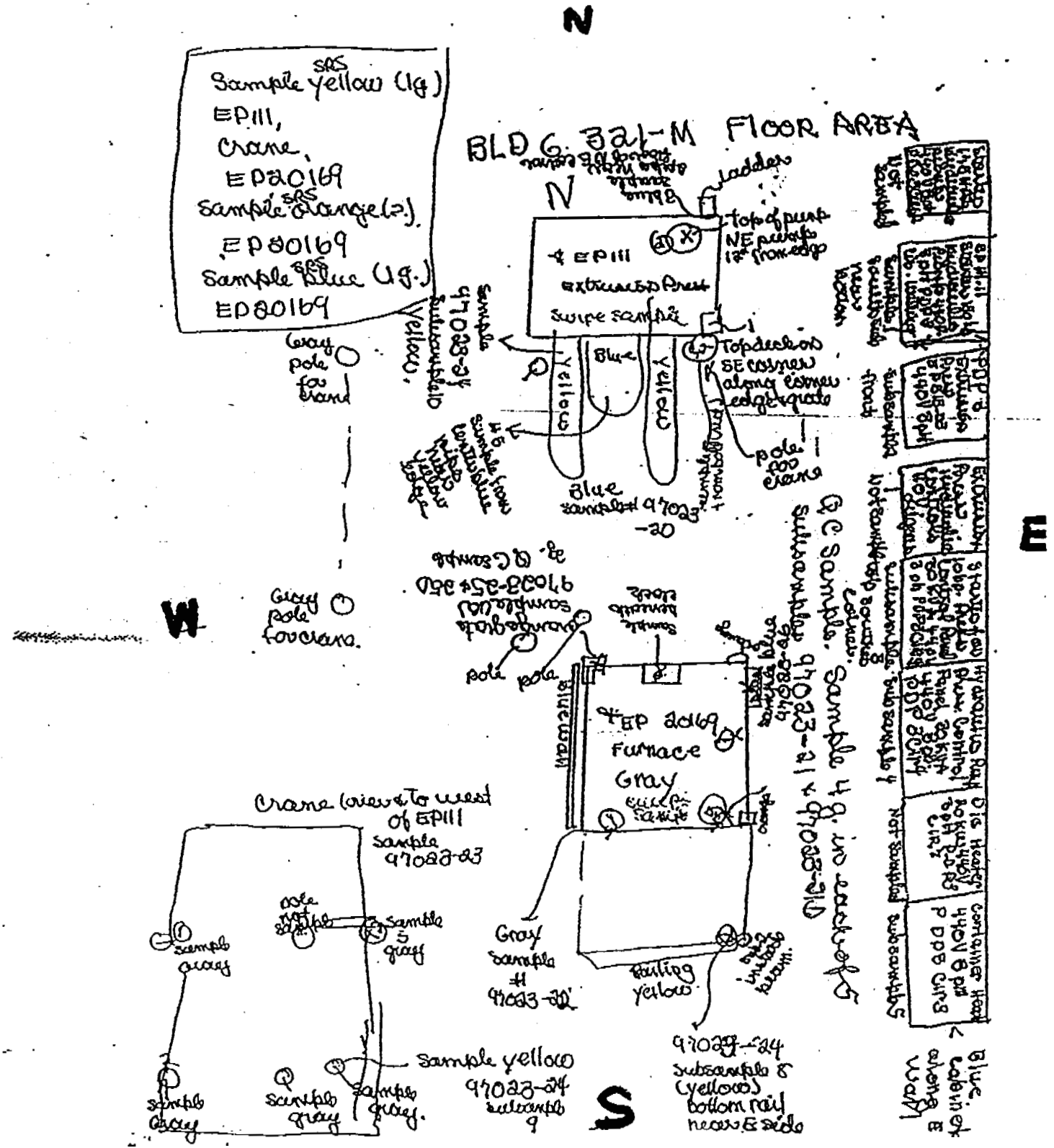
5 2g. samples green paint from EP20159 samples ID 97023-19 (composite into one 10g. sample.

one 1g blue paint sample ID 97023-26

S

ATTACHMENT 7

BLDG. 321-M, STRATA 20-26
SAMPLE NOS. 67023-20 THROUGH 67023-26.
EQUIPMENT NOS.: EP111, EP111.03 CABINETS, EP20169, AND CRANE
SWIPE NO. EP111 AND EP20169



Enclosure 5

SAMPLING STRATA AND RESULTS FOR 320-M AND 321-M EQUIPMENT

Stratum No.	Lab Sample	Room No.	EP No.	Description	Manufacturer	Paint Color	PCBs (PPM)	PCBs in ug/wipe (ug/100cm²)
Bldg. 320-M								
1	11	156	3011	Lathe Turret 25 HP	Gisholt Lathe	Green	27	
29	1		3012.2	Lathe Turret 7.5 HP Swipe sample EP3011	Gisholt Lathe	Green		0.76
2	12	156	280	Lathe-Engine	Monarch Lathe	Green	43	
3	9	156	276	Lathe-Turret	Warner Swasey	Green	15	
4	10	156	3013	Lathe-Turret 7.5 HP	Gisholt	Green	27	
30	2			Swipe sample				1.7
5	17	156	3012.3	Lathe-Turret 7.5 HP	Gisholt	Green	69	
6	18	156	3018	Double Acting Press (2 pieces)	Hannifin Corp.	Green	34	
7	22	156	20718	Welder	Cecil C. Peck Co.	Green	24	
31	3			Swipe sample				N/A
8	23	156	10718-1	Welder Control Panel	Harneschfeger	Yellow	13	
			10718-2	Welder				
9	13	157	252	Extrusion Press	Watson-Stillman	Green/glossy green	17	
32	4			Swipe Sample				4.6
10	14	157	158	Controller Cabinets	Lindberg	Gray	38	
11	7	157	158	Lindberg Billet Heater	Lindberg Furnace	Green	3.5	1.9
33	5			Swipe sample				
12	8	157	252	Controller cabinets		2 colors of green	18	
13	36	157	252	Motors, pumps on top of 252 Extrusion Press See attachment 4. Sample 2 g. from each motor, pump on the selected side or top.		Gray	11	
14	24	157	252	Console		Bluish gray	13	

Stratum No.	Lab Sample	Room No.	EP No.	Description	Manufacturer	Paint Color	PCBs (PPM)	PCBs in ug/wipe (ug/100cm^2)
15	15	157	255	Recorder Heat Furnace	Brown Fintube Co.	Green	26	
34	6			Swipe Sample				1.4
16	16	157	255.2	Furnace Tempering 5 HP	Lindberg-Furnace	Gray	62	
17	19	157	20221	Saw T-Pin	Sala Adige	Green	22	
18	20	129	20219	Lathe-Engine-Long Bed	Lehmann	Gray	280	
19	21	131	20159	Stone Saw	Stone Machine	Green	13	
Bldg. 321-M								
20	32		111	Extrusion Press 3 pumps: 150 HP model EY-15025, 75 hp model BY-6025, and 10 hp model P2304c4 . 4 motors: Mandrel Positioning, 75 hp, serial EP451, Control-Preheat, 7723-3520, and control-die heat DW1409. Sample only pump on northeast edge.	Lake Erie	Blue	1.3	
35	28			Swipe Sample				N/A
21	34		111.03	Cabinets Cabinets to be sampled: 1: EP111.11 Starter 150 hp hydraulic pump 440 V, 3 hp PDP 3 Cir, Westinghouse, 2: PDP 3 Extrusion Press EP513.03, 440 V, 3: Starter for 10 HP Press Control Panel 30 KVA 440 V 3 hp PDP3 Cir 4, 4: Hydraulic Pump press control Panel 30 KVA 440 v 3 hp PDP 3 Cir 4, 5: Container Heater 440 v 3 hp PDP 3 Cir 3. Not sampled: Die Heater 20 KW 440 V, 3 hp PDP 3 Cir 7, Extrusion Press Hydraulic Controls (Oilgear), and Starter 175 hp Hydraulic pump 440 v 3 hp PDP 3 Cir 2. Quality Control Sample (collect 20 g sample over 5 subsamples, 4 g each)		Blue	2.8	
36	33	Dupl.						
22	31		20169	Oven			2.0**	
37				Swipe Sample	Dispatch Industries	Gray	0.12	
23	35			Crane				N/A
						Gray	0.6	

Stratum No.	Lab Sample	Room No.	EP No.	Description	Manufacturer	Paint Color	PCBs (PPM)	PCBs in ug/wipe (ug/100cm²)
Over both buildings								
24	25			Collect 1 g samples from (1) EP3011, (2) EP3012.2 (3) EP280, (4) EP3013, (5) EP3012.3, (6) EP3018, (7) EP252, (8) EP20169 Bldg. 321-M, (9) Crane, Bldg. 321-M, and (10) EP111, Bldg. 321-M (Sample all in stratum, 1 g each)		SRS Yellow	5*	
25	30			Collect 2 g samples from (1) EP3011, (2) EP280, (3) EP3012.3, (4) EP3018, (5) EP20718, (6) EP20221, (7) EP255, (8) EP158, (9) EP20219, (10) EP20169, Bldg. 321-M (Unsampled in stratum: EP111, EP3012.2,EP 3013, and EP276) Quality Control Sample (Collect 20 g sample, 10 subsamples, 2 g each).		SRS Orange	91	
27**	27							
26	26			Collect 1 g samples from (1) EP3012.2, (2) EP276, (3) EP3013, (4) EP3012.3, (5) EP3018, (6) EP20718, (7) EP20221, (8) EP158, (9) EP20169, Bldg. 321-M, and (10) EP20159 Bldg. 320-M (Unsampled in stratum: 3011, 280).		SRS Blue	29** 8.7	

* Below detection limit

** Duplicates

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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FEB 21 1997

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Disposal of Surfaces Covered With PCB Containing Coatings

FROM: John W. Melone, Director
Chemical Management Division (7407)

TO: Regional Toxic Substances Division Directors

Recently, this Division has received questions referring to smelting coated (i.e., painted) metal surfaces or smelting metal surfaces from which coatings have been removed. There have been related questions on the disposal status of other surfaces, such as concrete, which are similarly coated. In all cases, the coatings contain PCBs. This interpretive memorandum is intended to respond to these questions.

Regulatory Status of Coated Surfaces

Coatings such as paint containing PCBs are regulated for disposal when the coating contains PCBs at concentrations greater than or equal to 50 parts per million (ppm). Coatings containing PCBs less than 50 ppm may be authorized for use, either as excluded products (at 40 CFR 761.3 and 761.20(a)(1) and (3)) or, as inadvertently generated PCBs resulting from an excluded manufacturing process (at 40 CFR 761.1(f), 761.3 and 761.20(a)(2)). Coatings containing PCBs at greater than or equal to 50 ppm are currently not authorized for use. While the TSCA PCB regulations do not require any coatings be tested for the presence of PCBs, such testing is advisable when PCBs are suspected since parties are responsible under TSCA for compliance with use and disposal requirements whether or not they are aware of their presence.

Coatings containing PCBs at greater than or equal to 50 ppm must be disposed of in accordance with the requirements of §761.60.

Interpretive Policy Letter for Metal Surfaces

On March 22, 1996, I sent an interpretive policy memorandum (attached) to the Regional Toxics Division Directors addressing the regulation for disposal of PCB articles with internal surfaces which had been drained of freeflowing liquids. The interpretive memorandum provided disposal options for the metal components of these drained articles. However, the memorandum

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was not intended to address coated surfaces (metal or non-metal).

Removing PCB Coatings From Metal Surfaces Destined for Smelting.

The PCB disposal regulations do not provide a specific disposal option for metal surfaces with coatings containing PCBs at greater than or equal to 50 ppm (hereafter referred to as PCB coatings). Therefore, they are subject to the general rules applicable to non-liquid PCBs (see 40 CFR 761 §761.60(a)(4)). Three disposal options exist. The metal surfaces and coatings can be incinerated, placed in a chemical waste landfill or disposed of using an alternate method of disposal approval (AMDA) under TSCA. An AMDA, issued under §761.60(e), can be used to authorize removal of PCB coatings under §761.20(c)(5) and subsequent disposal of the decontaminated surface and related materials. Removed PCB coatings are regulated for disposal as non-liquid PCBs. Any liquids or non-liquids contaminated during coating removal (e.g. solvents, tools, containers, work clothes, etc.) are regulated as if they contain the same concentration of PCBs as the coating material. However, they may be decontaminated and/or disposed of in accordance with an AMDA.

Metal surfaces decontaminated in accordance with the conditions of an AMDA can be authorized for smelting under an AMDA if, (1) there are no visible traces of PCB coatings and (2) it is demonstrated (using the standard wipe test as defined in §761.123) that the residuals are less than 100 micrograms PCBs per 100 square centimeters of surface area. In the Agency's experience, this approach will result in no unreasonable risk.

Removing PCB Coatings from Surfaces Not Destined for Smelting

Disposal of concrete or other non-metal surfaces with PCB coatings, such as paint, must also be in accordance with the general rules applicable to the disposal of non-liquid PCBs. Any surface with coatings containing PCBs may be decontaminated pursuant to §761.20(c)(5), in accordance with the conditions of an AMDA, to less than 10 micrograms per 100 square centimeters of surface area. The decontaminated surface can then be distributed in commerce for reuse in accordance with §761.20(c)(5) and is unregulated for disposal.

Decontamination levels of greater than 10 micrograms PCBs per 100 square centimeters can be established in an AMDA (representing a site-specific spill cleanup policy) but they must be supported by a determination of no unreasonable risk to health or the environment. If decontaminated to greater than 10 micrograms per 100 square centimeters and reused, the AMDA must identify whether the material is regulated for disposal under general rules set forth in part 761 or if an alternative disposal method is established. Regions may find it most convenient to address unauthorized uses of PCB in coatings, decontamination levels for coated surfaces and subsequent disposition of decontaminated surfaces in one administrative mechanism.

Regardless of the administrative mechanism used to address surfaces with PCB coatings, sampling of decontaminated surfaces shall be in accordance with the post-cleanup verification sampling requirements in 40 CFR 761.130. Characterization sampling of coated surfaces shall be according to Regional guidance, taking into account the penetration of the coating and PCBs into

the surface. Verification of decontamination of non-porous surfaces shall be done using the standard wipe test (§761.123). Verification of decontamination of porous surfaces must use core samples and meet bulk material standards of less than 50 ppm at the time of disposal in other than a TSCA PCB chemical waste landfill. The proposed PCB Disposal Amendments published on December 6, 1994, would address decontamination (at §761.79) and disposal of most surfaces with PCB coatings (at §761.62). When the PCB Disposal Amendments are published as final rules, they will take precedence over this interpretive memorandum. Please direct questions concerning this memorandum to Dr. John Smith at (202) 260-3964.

Attachment

cc: PCB Regional Coordinators